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EXAMINER	
JUBA JR, JOHN	
ART UNIT	PAPER NUMBER
2872	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/029,447	Applicant(s) HAZZARD, THOMAS B.
	Examiner John Juba	Art Unit 2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 April 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I in Paper No. 6 is acknowledged. An action on the merits of the elected invention follows.

Drawings

The corrected or substitute drawings were received on March 5, 2002. These drawings are approved by the examiner.

Claim Objections

Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Was claim 9 to depend instead from claim 7?

Claim Rejections - 35 USC § 112

Claims 24 and 25 – 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Since there are first and second sheets of photopolymer film, claim 24 is ambiguous as to which of said photopolymer films bears the recited protective coating.

Claims 25 and 26 – 28 are ambiguous and confusing as to the arrangement of layers. Claim 25 is ambiguous as to which of "said photopolymer film" is meant. Claim 25 depends from claim 21 and thus already recites a layer of adhering material on a second side of the second photopolymer film for adhering the films to the display screen surface. Thus, claim 25 is confusing or incorrect in reciting a layer of photopolymer film on a second side of "said photopolymer film". Was this claim to recite a further adhering layer on a second side of the first photopolymer film for adhering the first photopolymer film to the second photopolymer film?

Claim 28 is ambiguous as to which of two photopolymer films bears the protective layer.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 6, 7, 18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Windsor, et al. Referring *initially* to Figure 4 and the associated text, Windsor, et al disclose a hologram sheet providing an image not visible in a central field of view (22) but viewable over fields of view to the left and right. Windsor, et al teach

that the hologram is formed interferometrically (Fig. 3) and that the diffractive features are manifested as refractive index variations throughout the recording volume. Thus, one of ordinary skill would have "at once envisaged" a photopolymer layer. *In re Petering*, 301 F.2d 676, 133 USPQ 275 (CCPA 1962). With regard to the recitation of the film as being "flexible", the examiner believes that the photopolymer film of Windsor, et al is inherently flexible within the specificity recited. That is, when read in light of the specification, the expression "flexible" denotes no particular modulus or degree of elasticity.

With regard to claim 6, Windsor, et al disclose a plurality of individual images (Col. 3, line 35).

With regard to claims 2 and 7, Windsor, et al teach a 60° field of view wherein the holographic image is not viewable (Col. 3, line 63 – Col. 4, line 20).

With particular regard to claim 18, Windsor, et al clearly teach images viewable from both sides of the center region. Thus, it appears that *each* of the layers would produce an image viewable at least on the left hand side and on the right hand side. However, if such is not the case, Windsor, et al do teach providing an image to the left side and an image to the right side, and teach providing multiple layers to produce the multiple images. Thus, it follows that that the image from at least one layer would have been viewable from the left side, and that the image from at least one other layer would have been viewable from the other side.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 – 5, 8, 9, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Windsor, et al. As set forth for claims 1, 2, 6, and 7 above, Windsor, et al disclose the invention substantially as claimed. However, Windsor, et al do not disclose the extent of the left and right viewing regions recited, and do not expressly disclose one film being for producing an image viewable in the left hand field of view and another film producing an image viewable in the right hand field of view. However, Windsor, et al expressly teach a plurality of films for producing multiple images "that are each visible when viewed at a predetermined angle or range of angles" (Col. 3, lines 34 – 37), and teach that the images will not be viewable over a central field of view having a 60° angular extent (Col. 3, line 63 – Col. 4, line 20). Thus, Windsor, et al teach manipulating the viewing angles to achieve a desired visual effect. One of ordinary skill would have appreciated that the maximum range of viewing angles to either side would have been 60° (30° - 90° from the surface normal), and that a diffracted image 90° from normal (evanescent case) would not be attainable. Thus, it appears that one of ordinary skill would have arrived at a the angular extent of 30°- 45° through only routine experimentation in achieving an optimum value of a result effective variable. *In re*

Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). See also *in re Boesch,* 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 10 – 17, and 21 - 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Windsor, et al, in view of Official notice. As set forth above for claims 1, 6, 18, and 20, Windsor, et al disclose or at least suggest the invention substantially as claimed. Further, Windsor, et al teach stacking the layers in various arrangement with a lens (Col. 2, lines 55 – 67), and teach making the layers readily interchangeable (Col. 5, lines 3 – 18). However, Windsor, et al do not expressly disclose a layer of adherent material as recited.

The examiner takes Official notice of the fact that, in applying overlays to a display, it was well-known to provide a layer of adherent material such as a pressure sensitive material or a cling vinyl to secure the overlay. The particular selection of one over the other was known to depend upon the number of times the overlay was to be positioned or repositioned.

It would have been obvious to one of ordinary skill to employ a layer of adherent material with the overlays of Windsor, et al, in the interest of providing attachment means that permit the overlays to be interchanged, as was well-known.

With particular regard to claims 13, 17, 24, and 28, Windsor, et al teach the lens as a protective layer. Thus, the lens fairly comprehends a "protective coating" layer. Whether the layer is applied by a method of lamination or "coating" is not germane to the patentability of the layer itself.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Town (U.S. Patent Application Pub. 2001/0039771 A1) discloses a hologram film passing light in a central field of view and diffracting images to left hand and right hand fields of view, and suggests use of the film as a privacy screen.

Liu, et al (U.S. Patent number 6,506,480) disclose an overlay with indicia undergoing a color shift at different viewing angles, and suggests inclusion of a holographic overlay that obscures the indicia in different geometries (at different viewing angles).

Drinkwater, et al (U.S. Patent number 6,369,919) disclose a holographic overlay that provides separate diffracted images to left and right fields of view.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Juba whose telephone number is (703) 308-4812. The examiner can normally be reached on Mon.-Fri. 9 - 5.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JOHN JUBA
PRIMARY EXAMINER
Art Unit 2872

June 25, 2003